



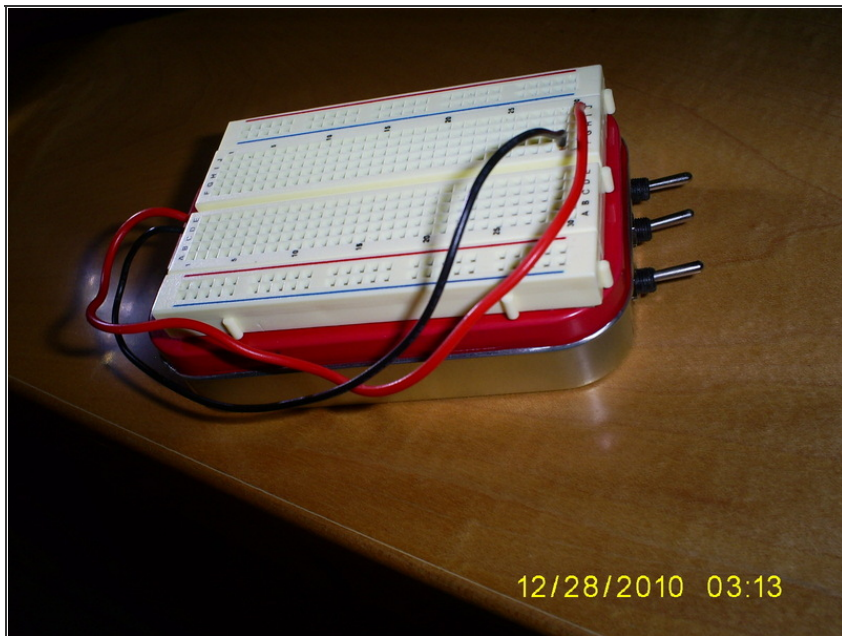
Altoids Tin Breadboard with Power Supply

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SUMMARY

A breadboard is like a circuit board that is already connected; you just have to insert the parts. This is yet another Altoids tin project that lets you turn on different voltages to the breadboard.

Step 1 — Altoids Tin Breadboard with Power Supply



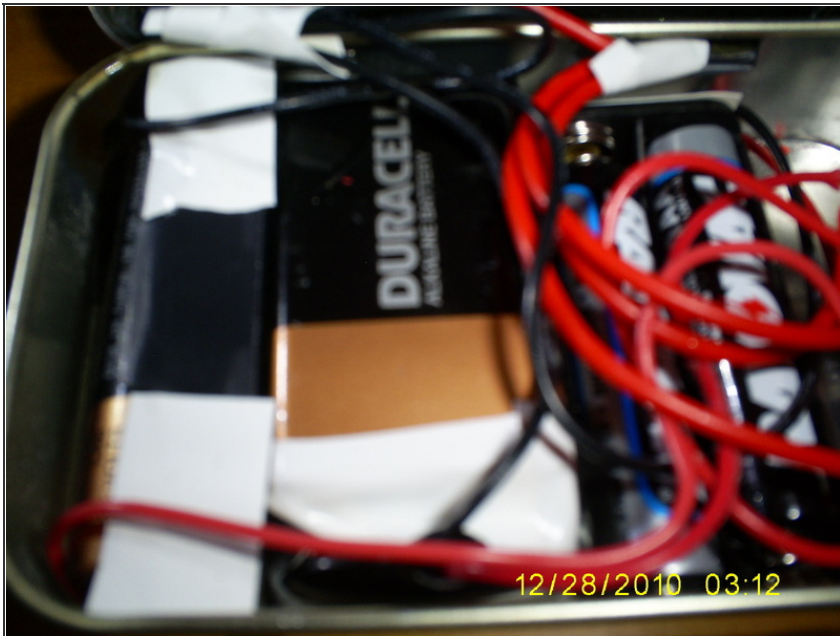
- First you should gather the parts:
- 1 half-sized breadboard.
- 1 regular 50+ Altoids tin.
- Three 1-way toggle switches.
- A nine-volt battery and clip.
- 1 single-AA or AAA battery holder and batteries for it.
- 1 2-AAA holder and batteries (preferably) or if not, a 2-AA holder and batteries.
- At least 3 feet of red wire and three feet of black. Make sure you have both; color-coding is helpful when wiring. Use 20- to 24-gauge wire.

Step 2



- First drill three holes in the side of the bottom portion of your Altoids tin for your switches. Then drill a hole just big enough for two wires to come out in the top no more than 1/3 inch from the edge. Now insert your switches into the three previous holes and attach them with the nuts that come with them.

Step 3



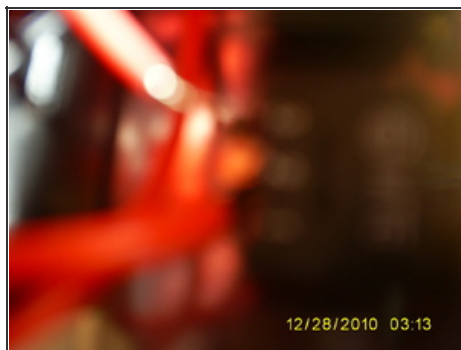
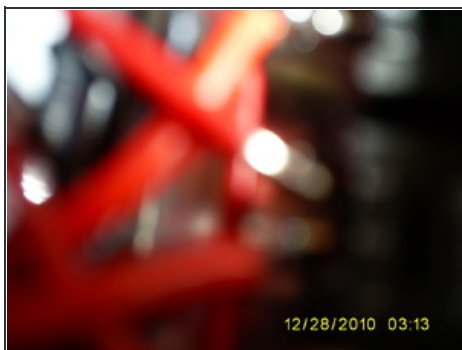
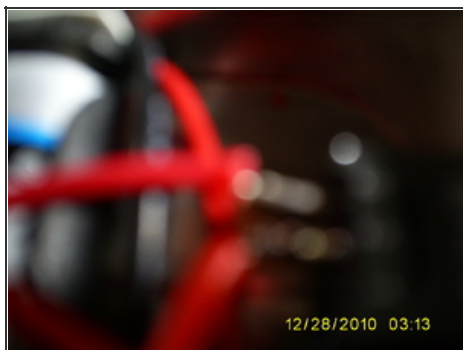
- Got that? Good.
- Now insert your battery packs in the case. Push them against the side opposite the switches so you can have room to solder. In the picture you can see all the wires because I forgot to take pics as I did the project. But focus on the battery packs.

Step 4



- Now solder all the negative leads from the battery holders to a single 3ft piece of BLACK wire. Then fish out as much as you can through the hole in the top.

Step 5



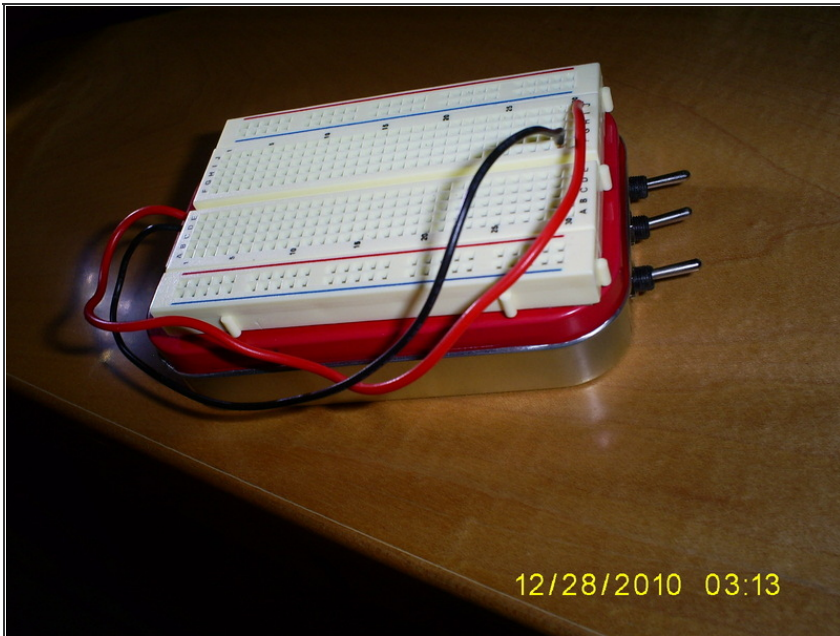
- Now solder the positive of one battery holder to a switch, then another positive to another switch, then one more positive to another switch. When you are done solder one 3-6 inch lead of red wire to the other pin on each of the switches. Then solder those to the strip of red wire that you have left and fish it out of the box.

Step 6



- You might want to file the hole that the wires come out of, or install a rubber grommet so that the sharp edges of the metal do not cut through the insulation on the wires.
- Now attach your breadboard to the top of the tin. If you got your breadboard at RadioShack then it should have a sticky backing (which mine did).

Step 7



- Strip the ends of the power wires and stick them into the breadboard's power busses.
- Here is the final product. You'll also want to label the switches with what voltages each one supplies. Then you can power all different kinds of devices with your portable breadboard and power supply.

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